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## TITLE

## LAC SHUTTLE VECTORS

## ABSTRACT OF THE DISCLOSURE

The invention discloses a Lac shuttle vector, comprising at least (a) a region which regulates a plasmid copy number; (b) an eukaryotic gene expression cassette, which comprises at least an eukaryotic gene transcriptional promoter sequence, a multiple cloning site and a transcriptional terminator sequence; (c) a lactic acid bacteria plasmid sequence, which comprises a plus origin of replication, and a nucleic acid sequence encoding for a protein which relates to the lactic acid bacteria plasmid replication; and (d) a non-antibiotic resistance selection gene and the promoter sequence thereof. The Lac shuttle vector features a non-antibiotic resistance gene as a selection marker, which is useful in pharmaceuticals and foods.